

WHAT IS CLAIMED IS:

- 1 1. A packaging arrangement for a coil of fiberoptic cable which
2 includes a plurality of individual coil loops, comprising:
 - 3 a. an outer packaging tray; and
 - 4 b. a fiberoptic coil carrier which is inserted into the outer packaging
5 tray for shipment or storage, and which can be removed from the tray, wherein the
6 carrier provides increased ease of handling of the fiberoptic coil by retaining it with a
7 plurality of separate retainers along the length of the fiberoptic cable, such that a
8 selected length of the fiberoptic cable can be removed from the carrier and remaining
9 coils of the fiberoptic cable remain secured to the carrier.
- 1 2. The packaging arrangement of claim 1, wherein the carrier also
2 defines a connector end retainer for retaining a connector end of the fiberoptic cable,
3 and a treatment end retainer for retaining a treatment end of the fiberoptic cable.
- 1 3. The packaging arrangement of claim 1, wherein the outer packaging
2 tray is sealed with a top closure, wherein the closure-sealed tray provides for
3 sterilization of the carrier/fiberoptic coil assembly in the outer packaging tray.
- 1 4. The packaging arrangement of claim 1, wherein the carrier is
2 designed and contoured specific to a particular surgical device, and is configured to
3 retain the particular surgical device until it is removed for usage.
- 1 5. The packaging arrangement of claim 4, wherein the outer packaging
2 tray is generic to a plurality of specific carriers and is not specific to a particular
3 carrier for a particular surgical device, such that it can package a standard fiberoptic
4 coil carrier.

1 6. The packaging arrangement of claim 1, wherein the carrier includes
2 an attachment means for attaching the carrier to a support, such that a surgeon can
3 position the carrier conveniently to require a minimum of handling.

1 7. The packaging arrangement of claim 6, wherein the attachment
2 means comprises a spring clip.

1 8. The packaging arrangement of claim 6, wherein the attachment
2 means comprises an adhesive area.

1 9. The packaging arrangement of claim 1, wherein the carrier is
2 formed from molded plastic, and includes a plurality of molded individual coil loop
3 retainers, each of which retains and secures a single coil loop of the fiberoptic cable,
4 which allows each loop to be individually released to eliminate springing, a molded
5 retainer to retain and secure a distal tip of the fiberoptic cable, and a molded retainer to
6 retain and secure a connector handle of the fiberoptic cable.

1 10. The packaging arrangement of claim 9, wherein each individual
2 coil loop retainer is formed by a molded groove.

1 11. The packaging arrangement of claim 10, wherein each molded
2 groove defines a pair of opposed undercut shoulders which snap around an inserted
3 individual coil loop.

1 12. The packaging arrangement of claim 1, wherein a first recess
2 defines a tip receiver/protector, and a second recess defines a connector handle
3 receiver/protector.

1 13. The packaging arrangement of claim 1, wherein the outer
2 packaging tray comprises a rectangular tray which is thermoformed from plastic, the
3 tray has a bottom surface, sidewalls, and a flange at the top of and extending around
4 the sidewalls, and the bottom surface is generally flat with shaped relief areas defining
5 one or more depressions to receive a shaped fiberoptic coil carrier.

1 14. The packaging arrangement of claim 13, wherein the relief areas
2 accommodate larger components of the fiberoptic cable such as the connector handle,
3 and also provide sufficient room and clearance to allow fingers to grasp and remove
4 the carrier, and wherein the carrier and fiberoptic coils are supported by intermediate-
5 height plateau surfaces, with the relief areas being positioned below the plateau
6 surfaces.

1 15. The packaging arrangement of claim 14, wherein raised studs rise
2 above the plateau surfaces to maintain the carrier and fiberoptic coil in position within
3 the tray, and also provide support for a top closure lid which is sealed to a flange
4 extending around the upper perimeter of the sidewalls.

1 16. The packaging arrangement of claim 15, wherein at least one
2 flange corner is recessed to provide an unsealed corner piece of the top closure lid
3 which is suitable for grasping to pry the lid away from the tray.

1 17. The packaging arrangement of claim 15, wherein the carrier is
2 generally flat, and is thermoformed from plastic, and the carrier has an exterior profile
3 and shape to fit within the sidewalls and studs and on top of the plateau surfaces of the
4 tray.

8 of the fiberoptic cable, such that a selected length of the fiberoptic cable can be
9 removed from the carrier and remaining coils of the fiberoptic cable remain secured to
10 the carrier;

11 b. packaging the fiberoptic coil carrier with the fiberoptic coil mounted
12 thereon in an outer packaging tray.

1 24. The method of claim 23, further including securing a connector
2 end of the fiberoptic cable to the carrier with a connector end retainer on the carrier,
3 and securing a treatment end of the fiberoptic cable to the carrier with a treatment end
4 retainer on the carrier.

1 25. The method of claim 23, further including sealing the outer
2 packaging tray with a top closure, and sterilizing the carrier/fiberoptic coil assembly in
3 the closure-sealed outer packaging tray.

1 26. The method of claim 23, including designing and contouring the
2 carrier to be specific to a particular surgical device, and designing and contouring the
3 outer packaging tray to be generic to a plurality of specific carriers, such that the outer
4 packaging tray can package a standard fiberoptic coil carrier.

1 27. The method of claim 23, including securing the fiberoptic coil to
2 the carrier with a plurality of individual coil loop retainers which are molded in the
3 carrier, each of which retains and secures a single coil loop of the fiberoptic coil,
4 which allows each individual coil loop to be individually released from the carrier.

1 28. The method of claim 27, including securing each individual coil
2 loop in a molded groove on the carrier.

1 29. The method of claim 27, including securing each individual coil in
2 a molded groove on the carrier defined by a pair of opposed undercut shoulders which
3 snap around an inserted individual coil loop.

1 30. The method of claim 27, including securing a treatment end of the
2 fiberoptic cable in a first molded recess in the carrier defining a treatment end
3 receiver/protector, and securing a connector end of the fiberoptic cable in a second
4 recess in the carrier defining a connector end receiver/protector.

1 31. The method of claim 23, including packaging the fiberoptic carrier
2 in a rectangular outer packaging tray which has a bottom surface, sidewalls, and a top
3 flange extending around the sidewalls, wherein the bottom surface is generally flat
4 with shaped relief areas defining one or more depressions to receive and support the
5 fiberoptic coil carrier.

1 32. The method of claim 31, including supporting the carrier and
2 fiberoptic coil on intermediate-height plateau surfaces positioned above the relief
3 areas.

1 33. The method of claim 32, including maintaining the carrier and
2 fiberoptic coil in position within the tray by raised studs which rise above the plateau
3 surfaces.

4 34. The method of claim 31, including sealing a top closure lid to the
5 top flange.